

NC Biology Check-Ins

Test Specifications

NC Check-Ins Overview and Purpose

NC Biology Check-Ins are interim assessments aligned to North Carolina grade-level content standards in biology developed by the North Carolina Department of Public Instruction (NCDPI). There are four NC Biology Check-Ins covering each of the four standard domains (Structure and Function of Living Organisms; Ecosystems; Evolution and Genetics; and Molecular Biology).

Since public school units (PSUs) are not assumed to be following the same pacing or curriculum, all four NC Biology Check-Ins will be available throughout the testing window and can be administered in any order. Each NC Biology Check-In can be given only once within any given course.

The main purpose of NC Check-Ins is to provide students, teachers, parents, and stakeholders with immediate in-depth action-data and a reliable estimate of students' current performance on the selected subset of content standards. A secondary purpose is derived from NC Check-Ins strong relationship with the end-of-course (EOC) summative test for Biology. Both EOCs and NC Check-Ins share a common item bank, and performance on the NC Check-Ins serves as an early indicator of a student's level of preparedness for the EOC summative test.

The NCDPI does not have validity evidence to support using results from NC Check-Ins as a predictor of student performance on the EOC summative test. Even though there is evidence of a significant correlation between scores from NC Check-Ins and EOCs, this correlation evidence by itself does not signify prediction. The overall value of NC Check-Ins is the use of in-depth action-data for formative purposes throughout the year to help students and teachers adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.

Prioritization of Standards

- The NC Check-Ins are aligned to the NC *Standard Course of Study* (NCSCS) for Biology, adopted by the North Carolina State Board of Education in March 2011.
- The NCSCS may be reviewed by visiting the NCDPI/K–12 Standards, Curriculum, and Instruction for Science webpage at

<https://sites.google.com/dpi.nc.gov/k-12science/home> The following content specifications are for test development purposes only and are not presented as a mandated pacing guide. The delivery of curriculum and instruction is a local decision; therefore, it is the expectation that since most standards are not taught in isolation, some schools may not have covered all areas in all standards assessed on any one NC Check-In.

- Data from content standards that have not been taught should be used as pre-test data.

NC Biology Check-Ins

Test Specifications

NC Biology Check-In			
Structure and Function of Living Things (24 Items)	Ecosystems (24 Items)	Evolution and Genetics (39 Items)	Molecular Biology (20 Items)
1.1.1	2.1.1	3.1.1	4.1.1
1.1.2	2.1.2	3.1.2	4.1.2
1.1.3	2.1.3	3.1.3	4.1.3
1.2.1	2.1.4	3.2.1	4.2.1
1.2.2	2.2.1	3.2.2	4.2.2
1.2.3	2.2.2	3.2.3	
		3.3.1	
		3.3.2	
		3.4.1	

Test Format

All NC Biology Check-Ins are available in online administration format and consists of twenty to thirty-nine items. Print versions are being prepared for students and schools that require them. All items for NC Biology Check-Ins are four-response multiple-choice items. Each question is worth one point.

Administration

The NCDPI offers four NC Biology Check-Ins within a course. PSU participation in any NC Check-In is voluntary. Schools are given the flexibility to schedule the administration of NC Check-Ins at any time during a designated window. NC Check-Ins are not timed assessments.

Student Reviews, Scores, and Reports

Teachers have access to students' test books (for paper administrations) or an electronic copy of the NC Check-In (for online administrations) to use for review sessions with students. Within five days of administering an NC Check-In and submitting student responses, school administrators and teachers have access to student, class, and school-level custom reports generated by NCDPI scoring and reporting software. These reports provide a summary of standard level performance expressed as number and percent of items answered correctly by student, classroom, and school. These reports are intended to support formative uses at the classroom and school level.

Comparing performance of schools across public school units is highly discouraged because schools are not assumed to be following the same pacing or curriculum. Schools are not expected to have completed the entire scope for all standards assessed in a NC Check-In prior to the administration because curriculum pacing is a local decision.

The NCDPI produces a [state aggregate report](#) with the summary of percent correct by item grouped by standard. The purpose of this report is to provide a reference on the empirical difficulty of items administered in the NC Check-In.